

**REMARKS**

Reconsideration of the present application in view of the above amendments and following remarks is requested respectfully.

Claims 1 and 5 to 19 are pending. Claim 1 has been amended. Claims 2, 3, and 4 have been canceled. Claims 15 to 19 have been added. Applicants acknowledge and appreciate the Examiner's favorable ruling that claim 12 defines allowable subject matter.

As set forth in Applicants' Response to the Restriction Requirement, which was forwarded via facsimile to the Examiner on April 17, 2000, Applicants hereby affirm election of the species of Example 11, set forth on page 28, lines 21 to 32, for prosecution on the merits. It is Applicants' understanding that this election is being made to aid the Examiner in conducting a search and examination of the claimed subject matter, and is not to be construed as limiting the scope of Applicant's claims. It is Applicants' understanding also that, if the elected subject matter is found to be allowable over the prior art, the search and examination will be expanded to cover other species, until it includes the full scope of the generic claims included in the elected group.

The present Office Action contains objections to the form of the claims and rejections under 35 U.S.C. §102, which are discussed in detail below.

Applicants respectfully disagree that claims 1 to 11 and 13 to 14 are drawn to an improper Markush group and submit that the claims as originally presented are proper. The Office Action states that the members of the instant Markush groups possess "widely different

physical and chemical properties." However, where, as here, a Markush expression is applied only to a portion of a chemical compound, the grouping does not depend on there being a community of properties in the members of the Markush expression. M.P.E.P. §2173.05(h). The propriety of the grouping is determined by a consideration of the compound *as a whole*. *Id.*

In this connection, Applicants' invention lies in the provision of novel phenylalanine derivatives possessing similar biological activity. Numerous working examples are set forth, for example, on pages 25 to 36 of the specification, each of which contains a phenylalanine core as defined in the present claims. Thus, despite the assertions in the Office Action, Applicants have shown that the compounds, when considered as a whole, are not so diverse that they demonstrate dissimilar or unrelated properties. On the contrary, Applicants have identified a common structural element and Markush groupings may be identified accordingly.

Nevertheless, to advance prosecution, Applicants have amended the claims in an effort to address the Examiner's concerns. As suggested in the Office Action, Applicants have deleted the term "or derivatives thereof" from the definition of R, and have also amended the definition of R<sup>1</sup>. It will be noted, however, that in addition to the R<sup>1</sup> variables suggested in the Office Action (phenyl and pyridinyl), pyrimidinyl has also been retained from previous claim 4. Applicants specifically point out in their specification at page 14, lines 33-34 that a phenyl, pyridinyl, and pyrimidinyl groups are particularly preferred groups encompassed in R<sup>1</sup>.

With respect to the variable  $(\text{Alk}^1)_r(\text{L}^1)_s$ , Applicants respectfully disagree that these linkers are functionally non-equivalent. As noted above, the proper analysis with respect to the propriety of a Markush grouping is whether the activity of the compound *as a whole* is maintained throughout the Markush expression. Applicants have demonstrated equivalency through the synthesis and testing of two very diverse linkers:  $\text{CH}_2\text{O}$  (Example 24, set forth on page 33, lines 5 to 15) and  $\text{CONH}$  (Example 26, set forth on page 33, lines 29 to 36). Accordingly, one of ordinary skill in the art would expect activity to be maintained in other, similar linkers within variable  $(\text{Alk}^1)_r(\text{L}^1)_s$ , and the Office Action provides no reasons for concluding otherwise.

Based on the foregoing, Applicants respectfully submit that the claims are in proper format and respectfully request that the rejection on the grounds that the claims are drawn to an improper Markush group be reconsidered and withdrawn.

#### **Discussion of the Rejections Under Section 102**

Claims 1 to 7 and 10 have been rejected as being anticipated in view of the disclosures of International Publication WO 99/43642 (the Cordell reference<sup>1</sup>), Japanese Patent No. 63-233963 (the Okamoto reference), and Int. J. Peptide Res. 46, 279-289 (1995) (the Bolin

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<sup>1</sup> Although the Office Action identifies the Cordell reference as International Publication WO 99/43642, Applicants note that Cordell is not a named inventor on this application. Applicants therefore believe the Examiner intended to cite International Publication WO 95/09838 in this regard. If Applicants are incorrect, clarification is requested respectfully.

reference). In order to advance prosecution, claim 1 has been amended to contain a proviso that Applicants believe renders these rejections moot. It will therefore be recognized that these references neither teach nor suggest the phenylalanine derivatives of the present claims. Under such circumstances, reconsideration and withdrawal of the rejections under Section 102 are requested respectfully.

**Miscellaneous**

Applicants have been advised that certain references cited on PTO-Form 1449 have not been received by the PTO, and as such, were not considered. Thus, Applicants enclose herewith copies of the missing references and new copies of the appropriate forms so that they may be considered.

Applicants have added method claims 15 to 19. Support for these claims is provided, for example, on page 4, lines 25 to 29 and page 5, line 4 to 8 of the specification.

**Conclusion**

Applicants believe that the foregoing constitutes a complete and full response to the Office Action of record. Accordingly, an early and favorable reconsideration of the rejections and an allowance of the pending claims is requested respectfully.

**DOCKET NO.: CELL-0072**

**PATENT**

Respectfully submitted,

A handwritten signature in black ink, appearing to read "G. L. Hillyer", with a horizontal line extending to the right.

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Date: September 27, 2000  
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